A method for producing an antibody against a *Sarcocystis neurona* antigen selected from the group consisting of a 16 kDa antigen and a 30 kDa antigen, as determined by SDS polyacrylamide gel electrophoresis, comprising:

(a) providing a microorganism containing a DNA encoding a fusion polypeptide in which a *Sarcocystis neurona* antigen selected from the group consisting of the 16 kDa antigen and the 30 kDa antigen is fused to a polypeptide which enables isolation of the fusion polypeptide by affinity chromatography;

(b) culturing the microorganism in a culture to produce the fusion polypeptide from the DNA;

(c) isolating the fusion polypeptide from the culture by affinity chromatography;

(d) admixing the fusion polypeptide isolated by the affinity chromatography with an adjuvant to produce an admixture;

(e) immunizing a mammal with the admixture containing the fusion polypeptide and the adjuvant to produce antibodies against the 16 kDa antigen or the 30 kDa antigen comprising the fusion polypeptide; and

(f) removing serum from the immunized mammal and isolating from the serum the antibody against the *Sarcocystis neurona* antigen selected from the group

consisting of the 16 kDa antigen and the 30 kDa antigen.

-30- (Twice amended)

A method for producing a monoclonal antibody against a *Sarcocystis neurona* antigen selected from the group consisting of a 16 kDa antigen and a 30 kDa antigen, as determined by SDS polyacrylamide gel electrophoresis, comprising:

(a) providing a microorganism containing a DNA encoding a fusion polypeptide in which a *Sarcocystis neurona* antigen selected from the group consisting of the 16 kDa antigen and the 30 kDa antigen is fused to a polypeptide which enables isolation of the fusion polypeptide by affinity chromatography;

(b) culturing the microorganism in a culture to produce the fusion polypeptide from the DNA;

(c) isolating the fusion polypeptide from the culture by the affinity chromatography;

(d) admixing the fusion polypeptide isolated by the affinity chromatography with an adjuvant to produce an admixture;

(e) inoculating mice with the admixture containing the fusion polypeptide and the adjuvant to produce antibodies against the 16 kDa antigen or the 30 kDa antigen comprising the fusion polypeptide;

(f) removing the spleens from the mice which

produce the antibodies against the fusion polypeptide;

(g) removing spleen cells from the spleens and mixing the spleen cells from the spleens with mouse myeloma cells to produce a mixture of fused cells consisting of spleen cells fused to myeloma cells, the spleen cells, and the myeloma cells;

(h) selecting the fused cells on cell culture medium in which the fused cells can grow but in which the spleen cells and the myeloma cells cannot grow; and

(i) screening the fused cells for fused cells which produce the monoclonal antibody against the *Sarcocystis neurona* antigen selected from the group consisting of the 16 kDa antigen and the 30 kDa antigen to produce the monoclonal antibody.

-32- (Twice amended)

The method of Claim 29 or 30 wherein the polypeptide comprising the fusion polypeptide is protein A and the isolation of the fusion polypeptide is by affinity chromatography using an IgG-linked resin which binds the protein A comprising the fusion polypeptide.

-33-(Twice amended)

The method of Claim 29 or 30 wherein the polypeptide comprising the fusion polypeptide is polyhistidine and isolation of the fusion polypeptide is by affinity chromatography using a Ni^{2+} resin which binds the polyhistine comprising the fusion polypeptide.

-34-(Twice amended)

The method of Claim 29 or 30 wherein the polypeptide comprising the fusion polypeptide is glutathione S-transferase and isolation of the fusion polypeptide is by affinity chromatography using a glutathione Sepharose 4B resin which binds the glutathione S-transferase comprising the fusion polypeptide.

-35-(Twice amended)

The method of Claim 29 or 30 wherein the polypeptide comprising the fusion polypeptide is a maltose binding protein and isolation of the fusion polypeptide is by affinity chromatography using an amylose resin which binds the maltose binding protein comprising the fusion polypeptide.